

In the Abstract

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ABSTRACT

A capacitance detecting proximity sensor forms a proximity detection range in a spatially open region, avoids the effects resulting from peripheral objects outside the detection target, and enables proximity detection with few malfunctions. The proximity sensor includes: a first detection electrode and a second detection electrode that are disposed to have a predetermined range difference h with respect to a detection direction Y in which a detection subject comes into proximity to the proximity sensor and are independent from a ground potential; and a proximity detection circuit that outputs, as a proximity detection output, the difference between a capacitance to ground C_a formed by the first detection electrode and a capacitance to ground C_b formed by the second detection electrode.